(54) Title: METHOD OF CONSTRUCTING NAVIGABLE COMPUTER SITES
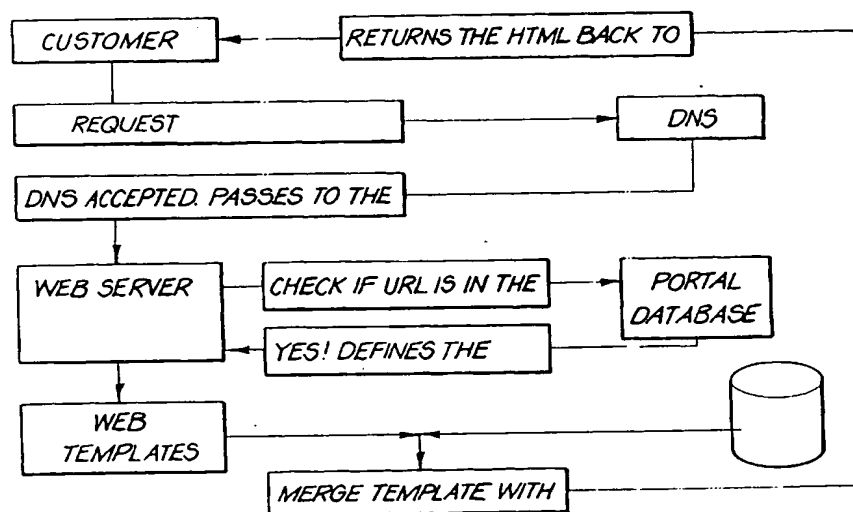
(57) Abstract: A method of constructing navigable computer sites includes the steps of identifying a database of enterprises to be provided with a navigable computer site. Typically the database will be that of a telecommunications company or Internet service provider. A portal is constructed. The information contained in the database relating to one or more of the enterprises is entered into templates to generate a web page for a navigable computer site customised to that particular enterprise. Each enterprise is provided with a site address which is typically www.enterprise name.portal name.com. For the enterprise name, any non-distinctive content may be stripped off. For example, the enterprise name of "Bowen Florist Pty Ltd" would simply become "Bowen Florist". Each enterprise is listed in the portal database in one of five categories being commerce, general production, life style, property and transport. Typically the navigable computer site is generated free of charge and the enterprises are given the opportunity to upgrade to an enhanced website for a fee.

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Method of constructing navigable computer sites

Field of the Invention

This invention relates to a navigable computer site, by which is meant
5   an Internet, intranet, or extranet site which may be visited and explored
including a single web page. The invention particularly concerns a method
of constructing and developing a large number of navigable computer sites,
typically associated with a single portal site.

Background of the Invention

10   Enterprises including small and medium size enterprises (SMEs),
businesses, farmers, sole traders, merchants who wish to have a presence on
the Internet, particularly the worldwide web (www), may either build a
navigable computer site (website) themselves or pay a company to design
and build the website for them. In the following specification, the term
15   enterprise will be taken to encompass any entity which is in business or
trade, selling goods or services including but not exclusively, merchants,
traders, manufacturers, businesses, and farmers. A number of challenges
face enterprises who choose to build their own website and a number of
hurdles must be overcome to produce the website. The procedure is usually
20   quite time consuming and the enterprises need to be technically competent
enough to create the site in an application such as "Front Page Express", to
rent space on a server, to upload the necessary files, and to maintain the site.
In addition, the enterprise may need to know how to use special languages
25   such as HTML to make their site attractive and FTP to load the site onto the
server. This is a daunting task for many enterprises, particularly small and
medium sized enterprises who may have little or no computing or IT skills.

Enterprises who choose to employ someone else to build their sites, are
faced with expensive development charges for the site and costs for various
30   services which they often do not require. For many small and medium
enterprises, the costs are prohibitive.

Whichever choice is taken by the enterprises, either option involves a
large investment in time or money, or both. This investment is particularly
significant with smaller businesses. This may result in the enterprise losing
35   customers or losing potential customers through its lack of a web presence.

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It is an object of the present invention to overcome the problems of the prior art described above and provide an improved method of constructing navigable computer sites.

Summary of the Invention

In its broadest aspect, the present invention comprises a method of constructing navigable computer sites including the steps of:

identifying a database of enterprises to be provided with a navigable computer site;

constructing a portal;

entering the information contained in the database relating to one or more of the enterprises into templates to generate a page for a navigable computer site customised to that particular enterprise;

for each enterprise for which a computer site is to be created, generating a unique site address for that enterprise, each site address being associated with the portal and typically including the name of the business and the name of the portal.

The navigable computer site is generated free of charge typically for all enterprises in the database. The enterprise are then advised of the existence of their "own website" and are invited to visit the website and if desired, upgrade it to display more information, make sales etc. The advantage of the present invention, is that by presenting the enterprise with a free website, the first step for getting the enterprise onto the web and into e-commerce is made at no cost and no trouble to the enterprise.

The first hurdle is overcome and the possibilities of e-commerce are made clear to the enterprise.

Typically the navigable computer site for each enterprise will have from one to five web pages.

The database used to provide the information on the enterprises will typically be a telecommunications company database or an Internet service provider's database, but other databases could be used, such as a bank's database.

Typically the web pages of the navigable computer site will display the trading name of the enterprise, its address and its contact details such as telephone and facsimile numbers. The web page might also include an invitation to the enterprise to upgrade the single page site to provide more

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information to viewers and to enable the undertaking of e-commerce on the website. There may be a further link to enable the organisation to see statistics relating to the number of visitors to their website. A further link might take the organisation to a domain registration organisation to enable the enterprise to register their own domain name.

The website may also display a button to enable the enterprise to order a data collection booklet. The data collection booklet comprises a series of printed forms which enable the enterprise to design their website based on the templates provided choosing for example the number of pages, the background colours and textures, navigation bar and button colour, page themes and the like. Many enterprises without information technology skills are wary of filling in forms online, however they are used to dealing with paperwork and are happy to fill in physical forms and booklets.

The present invention preferably includes the construction of websites built from a series of templates and options set out in the booklet. This is considerably quicker than building a website to order.

Although the foregoing is described in relation to enterprises, it will be appreciated that a similar exercise could be carried out on individuals, not in businesses who might also wish to have a home page.

Brief Description of the Drawings

Specific embodiments of the invention will now be described by way of example only and with reference to the accompanying drawings in which:

Figure 1 shows a main table containing information for website templates;

Figure 2 shows a FILETYPE reference table;

Figure 3 shows a CATEGORY reference table;

Figure 4 shows a CITY reference table;

Figure 5 shows a SUBURB reference table;

Figure 6 illustrates a hardware and communication set up for a system embodying the present invention;

Figure 7 is a chart illustrating the process flow for the generator of a web page;

Figure 8 is a screen dump of a typical "seeded" web page;

Figure 9 is a diagram illustrating the process of building a website; and

Figure 10 is a diagram illustrating a subroutine in the process.

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Detailed Description of a Preferred Embodiment

The first requirement for implementing the present invention, is a
database which contains information about a number of clients, typically
small to medium sized enterprises. Organisations which have existing

5   databases with information about such enterprises include
telecommunications companies and Internet services providers. Each
enterprise is provided with a site address which is typically www.enterprise
name.portal name.com. For the enterprise name, any non-distinctive content
may be stripped off. For example, the enterprise name of "Bowen Florist Pty

10   Ltd" would simply become "Bowen Florist". Each enterprise is listed in the
portal database in one of five categories being commerce, general production,
life style, property and transport. The system includes a series of templates
which receives the information from the portal database on each company
utilises that information to generate a webpage.

15   The particular category of the "ENTERPRISE" will determine the
template used to generate the companies seed web page.

Figure 1 shows a main "COMPANY" table for each enterprise
(company) in the database which contains all the information necessary to
fill in the website template, and provide information for a search engine.

20   The information in the table is initialised by an import procedure, after
which time the operator can add or amend any data, such as the postal
address, for example.

Figures 2 to 5 show "FILETYPE", "CATEGORY", "CITY", "SUBURB"
tables which are referenced to the "COMPANY" table. The "FILETYPE"

25   reference table is designed to hold the information on the file types processed
by the program from the company information imported into the system.
"FILETYPE" is the first category of the company.

The "CATEGORY" reference table is designed to hold the information
on the classification categories. The information is automatically generated

30   from the Business Search Disk and is available in an Administration System
for maintenance.

The "CITY" reference table is designed to hold the information on all
cities supplied by the disk. The information is automatically generated
during the import procedure and is available in the Administration System

35   for maintenance.

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The "SUBURB" reference table is designed to hold the information on all suburbs supplied by the disk. The information is automatically generated by the import procedure and is available in the Administration system for maintenance.

5   Figure 6 illustrates one possible hardware set up for the portal. A local area network (LAN) hub 10 is linked to the Internet 12 via a firewall 14. A database server 16 and a web server 18 are linked to the LAN hub 10. The portal database 20 is associated with the database server 16. The data is stored as comma delimited files (refer to Figures 1 to 5) split by file category.

10   The system provides customised website interfaces for all enterprises registered in the portal database. Each enterprise website is the result of the merger of one of the five templates with the information stored in the database, see Figure 7.

Figure 8 shows a typical generated web page for a florist. The main

15   name includes the name of the enterprise "Bowen Florist" and the portal name EZSHOP. At 2, the name, address and contact details of the enterprise are displayed. At 3, some text appears depending on the particular template which as illustrated is an invitation to the enterprise "Bowen Florist" to either hyperlink to an online form to order an enhanced website on line or complete

20   a paper form (content collection booklet) provided with their bill for off line ordering of enhanced website. The invitation to upgrade, may offer "step by step" upgrades - for example, step 1 a brochure site, step 2 a brochure site plus a shopping cart; step 3 a brochure site, a shopping cart and offline payment, or step 4 a brochure site, shopping cart and online payment.

25   At the left hand side of the web page at 4, there is a sample button bar which is not hyperlinked to any other pages, as the web page is merely a sample web page. At 5, 6 and 7 there are active links to the data collection and online sales department of the portal owner or system administrator for providing an enhanced website, a link to enable the enterprise to see visitor

30   traffic statistics, and a link to an online domain name registration provider.

Once the system has been set up to provide a sample web page for each enterprise in the portal's database, the enterprise can then be advised by the system administrator that they have a website, and offered the option of upgrading the site and if desired, register their own domain name.

35   The system administrator may allow the enterprises to either build their own enhanced website or may offer to build an enhanced website for

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them. At this stage the website manufacturer would send out content collection booklets to any business organisations which requested an improved website and that website is then created in a process illustrated in Figure 9.

5   The first step of the process shown at 100 is the receiving of the booklet from the enterprise. The information is unpacked 102 and used to generate various files and forms 104 indicating the enterprise which contain the data included in the booklet. Different websites go down different paths depending on the requirements of each business organisation. For example,

10   initially all websites require the booklet step 100, unpack step 102 and the files and forms step 104. After step 104, the process splits into two depending on whether the business organisation wishes to have their own domain name or is happy to retain the same address provided on their seed website. Step 106 is registering the domain name if the enterprise requested

15   their own domain name. Other steps include scanning in images 108, building the website 110 and referring to the client for approval of the website 112. On approval 114, the site goes live. There a number of sub routines in each step, for example Figure 7 shows the scanning sub routine.

          Typically, using the factory website building process described above,

20   the average time to create a website is around 50 minutes and the average time it takes the website to go live is an average of around 75 minutes. That timing includes quality control checks, rebuilding the sites if necessary and interacting with the customers to request further information where required.

          The factory built website may include the integration of SMS

25   messaging from the website to the website owner's mobile phone.

          Thus the present invention provides a process enabling many enterprises to have a presence on the net quickly, efficiently and cheaply.

          It will be appreciated by persons skilled in the art that numerous variations and/or modifications may be made to the invention as shown in

30   the specific embodiments without departing from the spirit or scope of the invention as broadly described. The present embodiments are, therefore, to be considered in all respects as illustrative and not restrictive.

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CLAIMS

1.   A method of constructing navigable computer sites including the steps of:

        identifying a database of enterprises to be provided with a navigable
5   computer site;

        constructing a portal;

        entering the information contained in the database relating to one or more of the enterprises into templates to generate at least one web page for a navigable computer site customised to that particular enterprise;

10   for each enterprise for which a computer site is to be created, generating a unique site address for that enterprise, each site address being associated with the portal.

2.   The method of claim 1 wherein the unique site address includes the name of the business and the name of the portal.

15   3.   The method of claim 1 or claim 2 wherein the navigable computer site is generated free of charge.

4.   The method of claim 3 wherein the navigable computer site is generated free of charge for all enterprises in the database.

5.   The method of any preceding claim wherein the enterprises are
20   advised of the existence of the page customised for their particular enterprise and are invited to visit the website and if desired, upgrade it to display more information or to enable sales to be made at the web site.

6.   The method of any preceding claim wherein the customised navigable computer site for each enterprise has from one to three web pages.

25   7.   The method of any preceding claim wherein the database used to provide the information on the enterprises is a telecommunications company's database or an Internet service provider's database.

8.   The method of any preceding claim wherein the web pages of the customised navigable computer site display a trading name of the enterprise,
30   an address and contact details for the enterprise.

9.   The method of any preceding claim wherein the web page includes an invitation to the enterprise to upgrade their site to provide an enhanced navigable computer site more information to viewers and to enable the undertaking of e-commerce on the website, typically, in a step by step
35   manner.

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10.　　The method of claim 9 wherein the web page includes a link to a page showing statistics relating to the number of visitors to the enterprise's website.

11.　　The method of claim 9 or 10 wherein the web page includes a link to a

5　domain registration organisation to enable the enterprise to register their own domain name.

12.　　The method of any one of claims 9 to 11 wherein the web page displays a link to enable the enterprise to order a data collection booklet for use in producing the enhanced navigable computer site.

10　13.　　The method of claim 12 wherein the data collection booklet comprises a series of further templates which enable the enterprise to design their enhanced website based on the further templates set out in the booklet.

14.　　The method of any preceding claim wherein each enterprise in the database is categorised by enterprise type and the enterprise type determines

15　the template used to generate the enterprise's web page.

No	FIELD	TYPE	DESCRIPTION
1	ID	INT	UNIQUE IDENTIFIER
2	COMPANY NAME	VARCHAR(100)	DESCRIPTIVE COMPANY NAME
3	FILE TYPE	INT	THE NAME OF THE FILE FROM "BUSINESS SEARCH" DISKS. REFERENCE TO FILE TYPE TABLE
4	CATEGORY	INT	YELLOW PAGES CLASSIFICATION. REFERENCE TO CATEGORY TABLE
5	ADDRESS	VARCHAR(255)	STREET ADDRESS
6	SUBURB	INT	STREET SUBURB. REFERENCE TO SUBURB TABLE
7	CITY	INT	STREET CITY. REFERENCE TO CITY TABLE
8	POSTCODE	VARCHAR(10)	STREET POST CODE.
9	TELEPHONE	VARCHAR(30)	COMPANY TELEPHONE NUMBER
10	POST ADDRESS	VARCHAR(225)	POSTAL ADDRESS
11	POST SUBURB	INT	POSTAL SUBURB. REFERENCE TO SUBURB TABLE
12	POST CITY	INT	POSTAL CITY. REFERENCE TO CITY TABLE
13	URL	VARCHAR(225)	COMPANY WEB ADDRESS
14	STATUS	TINYINT	RECORD STATUS (1-ACTIVE, 0 -INACTIVE
15	UPDATED BY	VARCHAR(20)	UPDATED BY OPERATOR NAME
16	UPDATED DATE	SMALL DATE TIME	DATE & TIME LAST UPDATED

FIG. 1

No	FIELD	TYPE	DESCRIPTION
1	ID	INT	UNIQUE IDENTIFIER
2	FILE TYPE	VARCHAR (20)	FILE NAME
3	TYPE NAME	VARCHAR (100)	TYPE NAME (TO BE DISPLAYED ON THE SEARCH SCREEN)
4	TEMPLATE URL	VARCHAR (100)	THE URL TO RUN A TEMPLATE
5	UPDATED BY	VARCHAR (20)	UPDATED BY OPERATOR NAME
6	UPDATED DATE	SMALL DATE TIME	DATE & TIME LAST UPDATED

FIG. 2

No	FIELD	TYPE	DESCRIPTION
1	ID	INT	UNIQUE IDENTIFIER
2	CATEGORY	VARCHAR (80)	YELLOW PAGES CLASSIFICATION CATEGORY
3	UPDATEDBY	VARCHAR (20)	UPDATED BY OPERATOR NAME
4	UPDATEDDATE	SMALL DATE TIME	DATE & TIME LAST UPDATED

FIG. 3

No	FIELD	TYPE	DESCRIPTION
1	ID	INT	UNIQUE IDENTIFIER
2	CITY	VARCHAR(50)	CITY NAME
3	UPDATED BY	VARCHAR(20)	UPDATED BY OPERATOR NAME
4	UPDATED DATE	SMALL DATE TIME	DATE & TIME LAST UPDATED

FIG.4

No	FIELD	TYPE	DESCRIPTION
1	ID	INT	UNIQUE IDENTIFIER
2	SUBURB	VARCHAR(80)	SUBURB NAME
3	UPDATED BY	VARCHAR(20)	UPDATED BY OPERATOR NAME
4	UPDATED DATE	SMALL DATE TIME	DATE & TIME LAST UPDATED

FIG.5

FIG.6

FIG.7

CUSTOMER

RETURNS THE HTML BACK TO

REQUEST

DNS ACCEPTED PASSES TO THE

DNS

WEB SERVER

CHECK IF URL IS IN THE

YES! DEFINES THE

PORTAL DATABASE

WEB TEMPLATES

MERGE TEMPLATE WITH
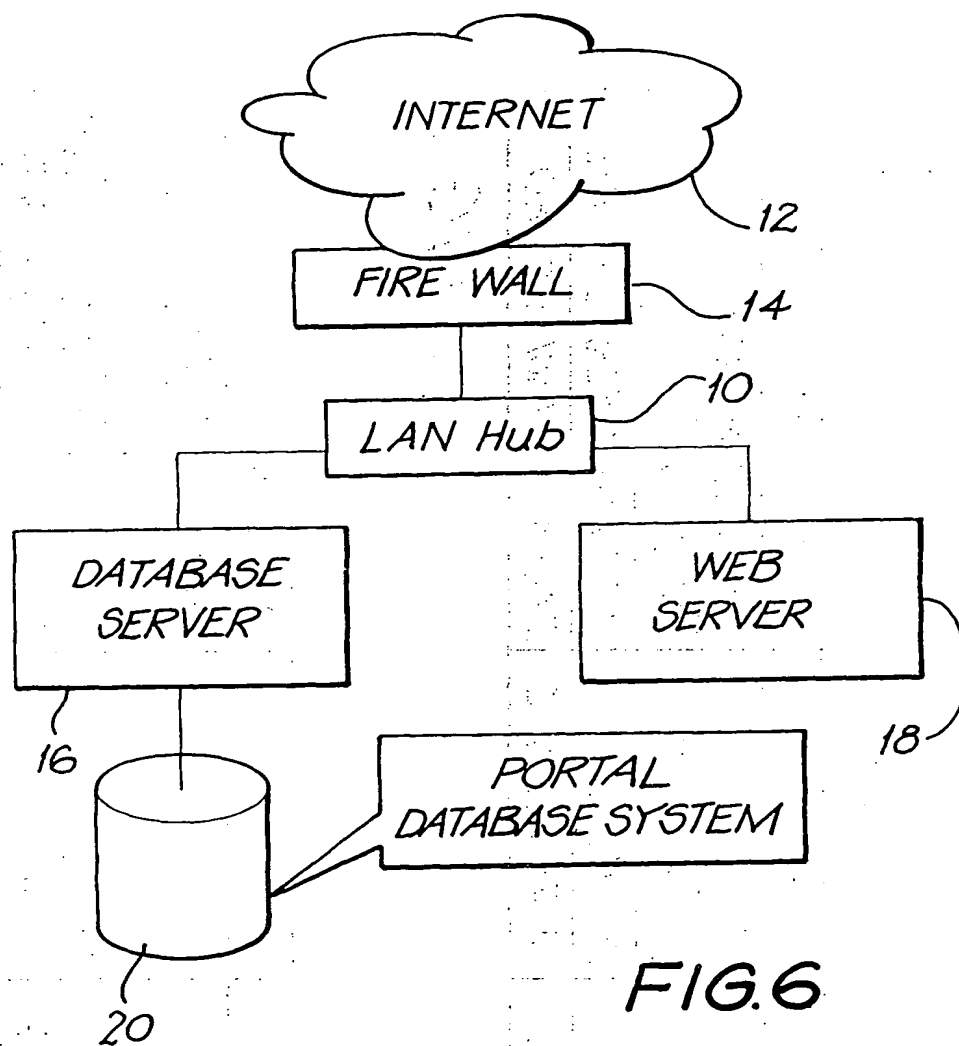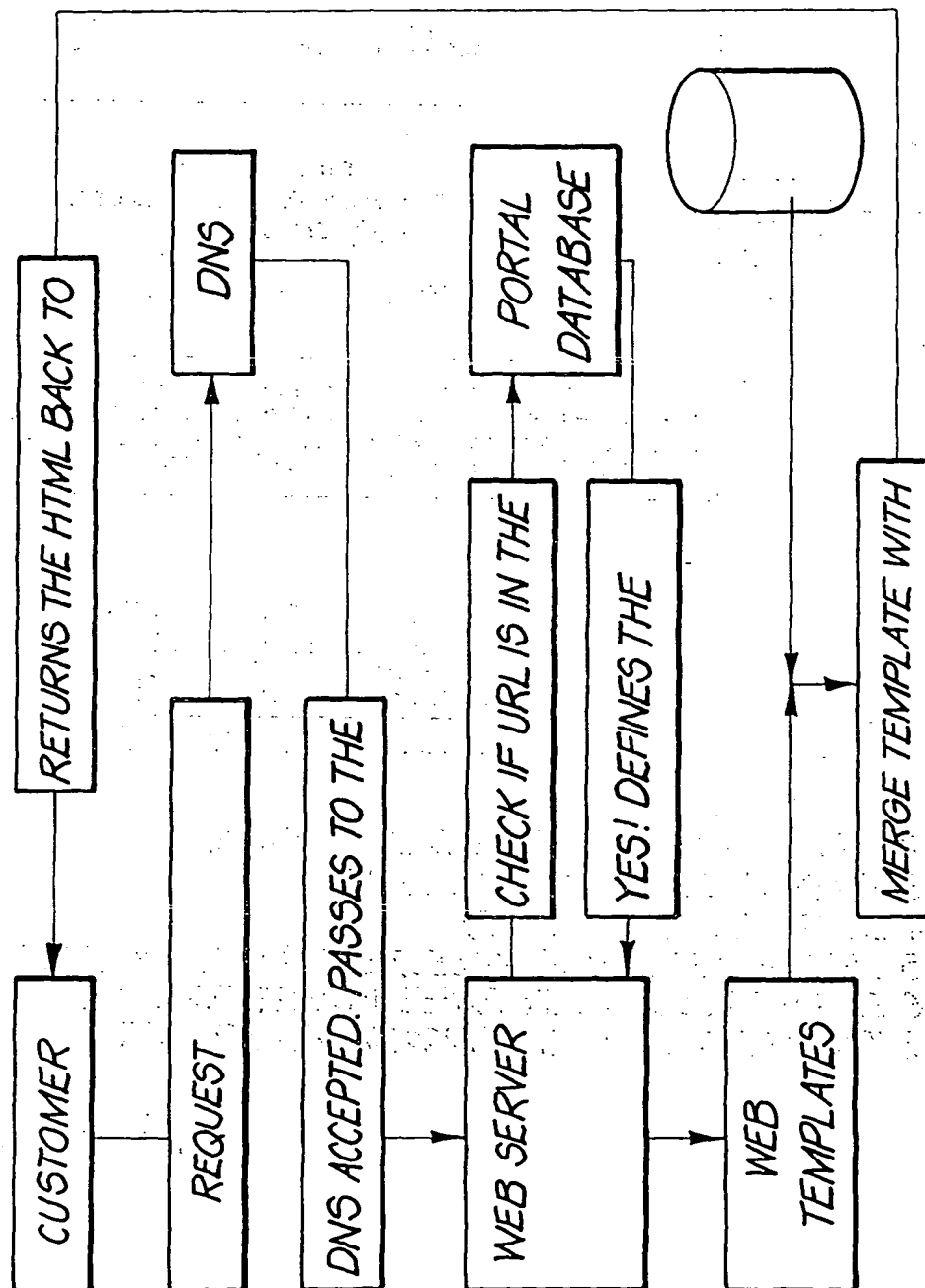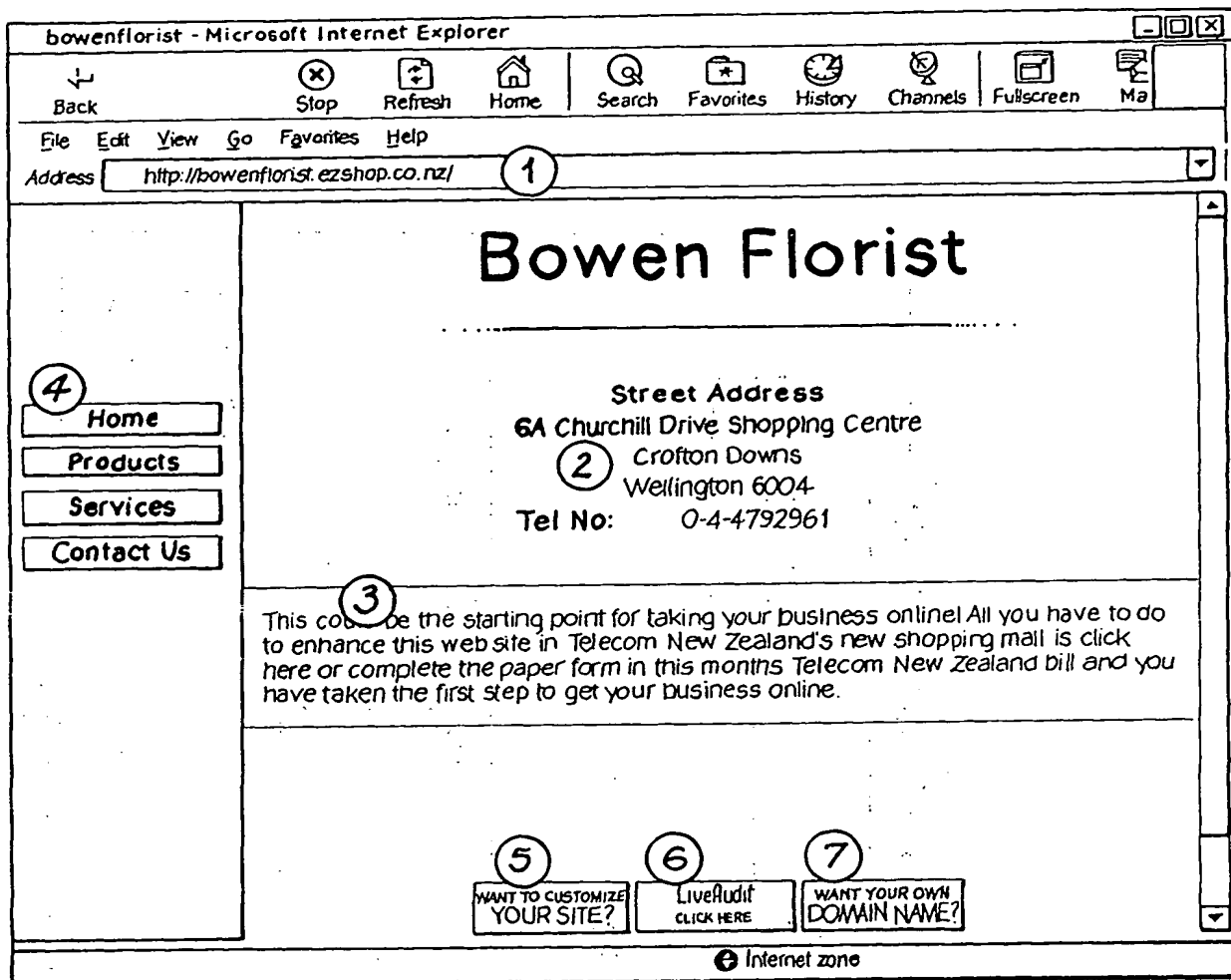
1. DOMAIN NAME.
2. NAME, ADDRESS & CONTACT DETAILS.
3. TEMPLATE FOR EACH CATEGORY.
4. BUTTON BAR (SAMPLE).
5. THIS LINKS TO DATA COLLECTION & ON-LINE SALES.
6. ENABLES CUSTOMER TO SEE VISITOR TRAFFIC STATISTICS.
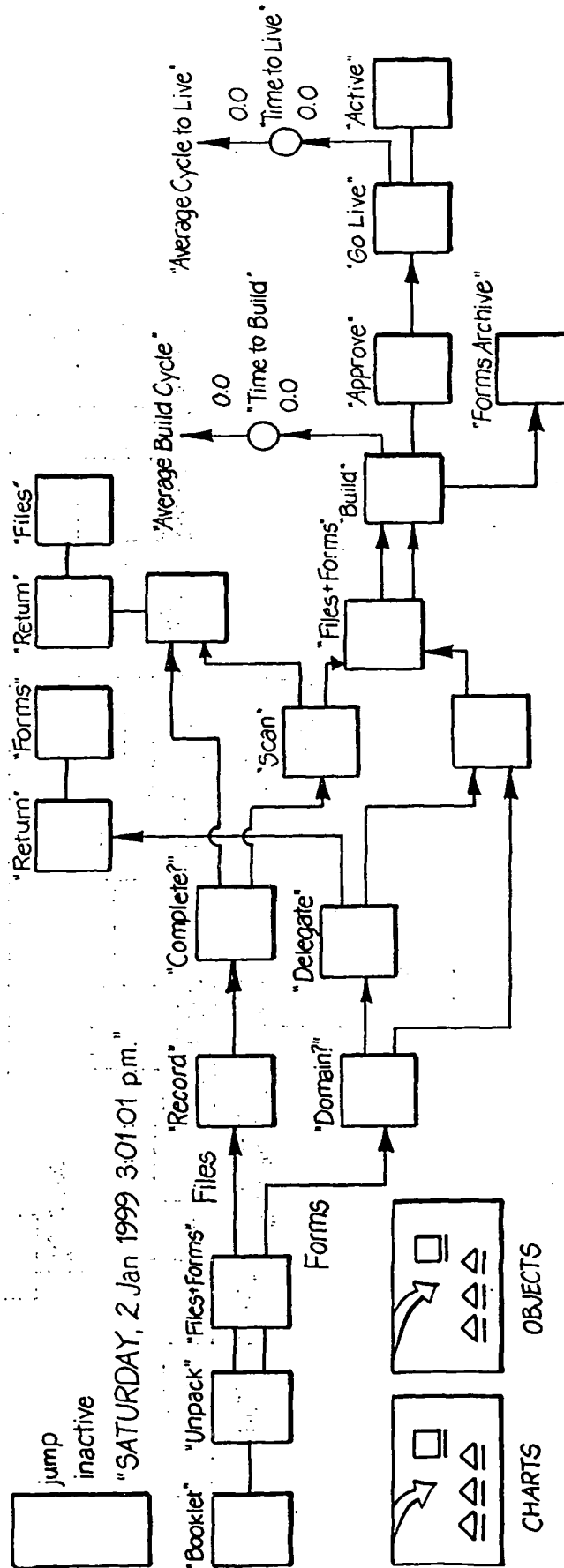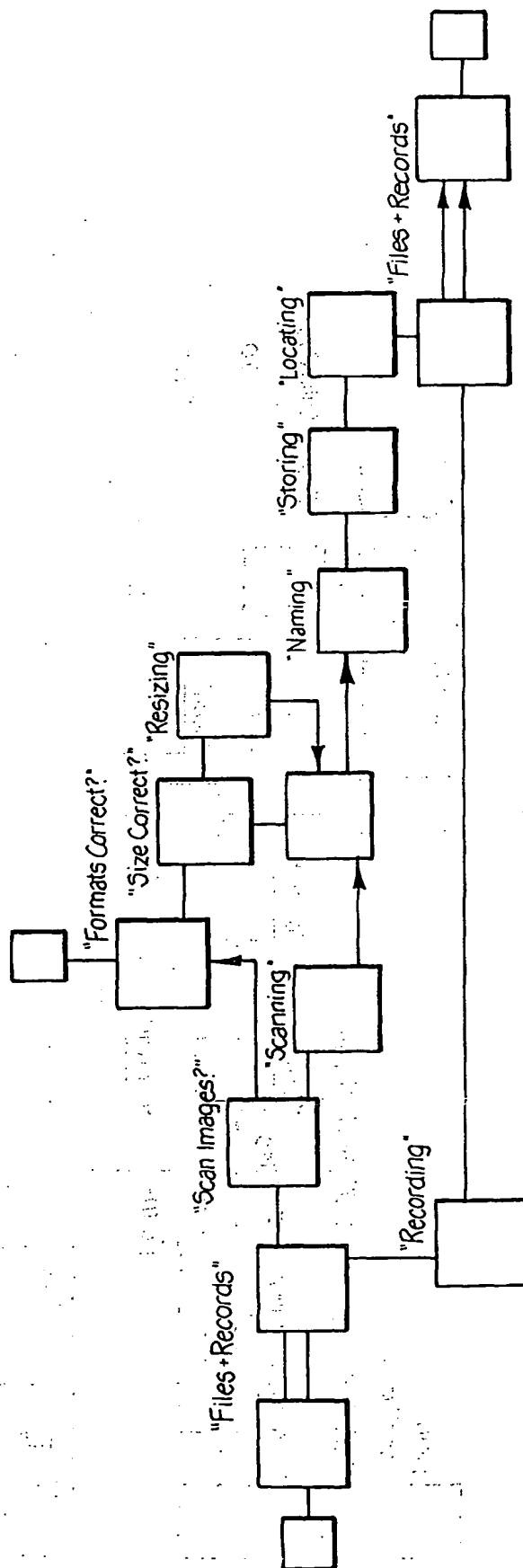7. THIS LINKS TO ON-LINE DOMAIN REGISTRATION.

FIG. 8

FIG.9

FIG. 10

A.	CLASSIFICATION OF SUBJECT MATTER

Int. Cl. [7]:   G06F 17/30, G06F 17/60

According to International Patent Classification (IPC) or to both national classification and IPC

B.	FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
WPAT: template, web page, web site, home page, internet site, internet page, html page

C.	DOCUMENTS CONSIDERED TO BE RELEVANT	
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6026433 (D'Alach et al.) 15 February 2000 See whole document	1-14
P, X	WO 00/57314 (ATOMICWEB) 28 September 2000 See whole document	1-14

	Further documents are listed in the continuation of Box C	[X] See patent family annex

*	Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A"	document defining the general state of the art which is not considered to be of particular relevance		
"E"	earlier application or patent but published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O"	document referring to an oral disclosure, use, exhibition or other means		
"P"	document published prior to the international filing date but later than the priority date claimed	"&"	document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
21 June 2001	26 June 2001
Name and mailing address of the ISA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaustralia.gov.au Facsimile No. (02) 6285 3929	Authorized officer MICHAEL C. LANDER Telephone No : (02) 6283 2494

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report	Patent Family Member
WO 00/57314	AU 39188/00

END OF ANNEX

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